

REMARKS

Reconsideration and allowance are respectfully requested in light of the above amendments and the following remarks.

Claim 14 has been amended for cosmetic reasons to recite positive method steps in conformance with U.S. practice. Claim 19 has been placed in dependent claim format. New apparatus claims 20 and 21 correspond to claims 15 and 19, respectively, but they recite all elements in non-means-plus-function format in order to expand the scope of protection for this invention. Also, the independent claims have been amended for clarity in view of a misunderstanding and mis-statement of the invention reflected in Section 3 of the office action, as discussed in detail below.

Claims 14-19 stand rejected under 35 USC 103(a) as unpatentable over Coquin et al. (USPN 5,668,541) in view of Sekine et al. (USPN 6,067,497), Cleary et al. (USPN 4,638,437) and Middleton et al. (USPN 5,499,025). The Applicant respectfully traverses these rejections.

First, it is noted that Section 3 of the Office Action evinces a misunderstanding of the present invention in that it states:

"Further, it is not sure if the display of the present application really displays the run way in actual scale, since head up displays are usually small, it is not clear how the small

display can illustrate a very long runway in true scale."

However, it should be clearly noted that in the present claimed invention, the display does not display the runway at all. Instead, the pilot sees the runway in his normal field of vision. Only the symbol is displayed, for example, on the windscreen of the aircraft. The pilot sees the symbol on the display, and he also sees the runway, not on the display, but rather in his normal field of vision. But the symbol is positioned on the display so that it is projected on or superimposed on the pilot's field of vision at the actual stopping position that has been calculated according to the invention. The claims have been amended to clarify and emphasize this point.

The Office Action proposes that Middleton teaches this subject matter in column 11, lines 60-67, and column 13, lines 32-39 (Office Action page 3, lines 8-11). However, it is submitted that the office action is incorrect in this point, as discussed below.

Instead of the alleged teaching, Middleton teaches in Figs. 7E and 10B a heads-up display that displays a "runway graphic" (Middleton col. 11, lines 60-62, and col. 13, line 32, through col. 14, line 11). Fig. 10B illustrates the superimposed

display, on the runway graphic, of both a predicted stop point using maximum braking 63 (star symbol) and a predicted stop point using a current level of measured acceleration 64 (oval symbol) (col. 13, lines 33-38). In other words, in Middleton, both the runway and the predicted stop points are displayed on the display, and there is no superposition of stop points on the pilot's actual view of the runway.

The present claims distinguish over Middleton in that they relate to superimposing a displayed stop-point symbol on the pilot's actual view of the runway. The pilot's view of the runway is seen through the transparent windshield of the aircraft. The symbol is displayed (e.g., reflected) on the aircraft windshield such that this displayed symbol is superimposed on the pilot's view of the actual runway so as to provide a visual indication of where the aircraft is expected to come to a stop.

Because the displayed stop-point symbol of the claimed invention is superimposed on the pilot's actual view of the runway, it necessarily follows, contrary to the statement in the Office Action in the second paragraph of section 3, that this actual view of the runway cannot be seen in any scale other than its actual scale.

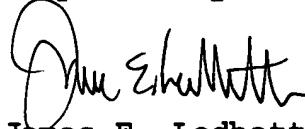
The claimed invention overcomes all of the problems that the Office Action acknowledges to exist in systems like that taught by Middleton. It does this by projecting or superimposing the display of a stop-point symbol on the pilot's actual view of the runway. As a result, the pilot need not search for the symbol in a small display nor search for the symbol's position on a scaled graphical representation of the runway. In light of the Office Action's recognition of the deficiencies of Middleton's system, the advantages provided by the invention defined by the claimed invention become all the more apparent.

In summary, Middleton does not teach or suggest the feature recited in the present claims of a heads-up display that displays a symbol at a position that is visually projected on the pilot's actual view of the running track of the aircraft, such that the symbol is visually projected at the calculated stopping position of the aircraft on the pilot's view of the running track. None of the applied Coquin, Sekine and Cleary references provide this teaching or suggestion. Thus, it is submitted that all pending claims are allowable over the individual or combined teachings of the applied art, and that the present rejections should be overcome.

In view of the above, it is submitted that this application is in condition for allowance and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below.

Respectfully submitted,



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